

Project Leader's Report

February 2005

USDA Forest Service - Southern Research Station - 320 Green Street Athens GA 30602 - <http://www.srs.fs.fed.us/disturbance>



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Outreach Activities:

- Four organized groups with a total of 91 people visited Brender Forest during the month of February. These groups included the Chattahoochee-Oconee Supervisor's Office and Oconee District staff who reviewed the new Forest Plan and visited several sites on the Hitchiti, such as the new logging road, firelines, prescribed burns, SMZ's and timber sales; two outdoor labs from Mercer University; and a State Foresters' BMP Program Review Team who visited the ideal logging road demonstration.

- Approximately 46 visitors came by the office at Brender Forest for information and 82 people signed the register at the Hitchiti Interpretive Trail. Some of these visitors came from as close as Gray, GA and as far away as Greenville, SC.

- Scott Goodrick provided a group of preschoolers at Live Oak Morning School in Athens with a lively and entertaining program on wind and weather. Students built anemometers and took wind measurements while learning the role of wind in weather along with some fun weather facts.

- David O'Conner, writer for National Geographic Magazine, is preparing an *article on wildland fire in the South*. His story references work by Gary Achtemeier on superfog and specifically names Gary, who answered questions that will clarify points made in the story.

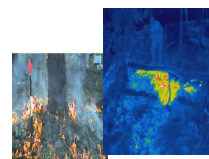
Technology Transfer:

- Rick Reitz presented a paper entitled "Community Advisor" at the Wildland Fire 2005 and National Fire Plan Conference in Albuquerque, NM. The conference was sponsored by the International Association of Fire Chiefs, U. S. Department of Interior, USDA Forest Service, and National Association of State Foresters.

- Scott Goodrick was invited to participate in the Eastern Area Fire Season Assessment held in Shepherdstown, WV, where a diverse group of fuels and climate experts developed a forecast of the expected fire conditions for the southeastern US for this year. Also attending the meeting was David Zierden, a cooperater from Florida State University's Center for Ocean and Atmospheric Prediction Studies. The consensus forecast calls for mostly near-normal fire activity, except for the peninsula of Florida, which is expected to see drier than normal conditions later this spring.

- Mac Callaham contributed to a progress report submitted by Paul Hanson, Coordinating Investigator to the Department of Energy Office of Science, Biological and Environmental Research (BER), Terrestrial Carbon Processes (TCP) Program. The report is a Summary of the 2005 Enriched Background Isotope Study (EBIS) Workshop, Livermore, CA, January 20-21, 2005.

- Ken Outcalt and John Stanturf gave an update of fire research to the Region 8 Fire Management Officers at their meeting in Atlanta. Ken talked about fuels research, particularly the Fire and Fire Surrogate study results and the long-term prescribed burning comparisons, and John talked about smoke and air quality research products now available, or expected to be out soon. Products on the market include regeneration guidelines for Table Mountain Pine, the Fire Encyclopedia, and the PB-Piedmont smoke model, which can be used for predictive and post-fire analysis. We have a data-grabber for going through the internet to obtain only the necessary MM5 output to run the model locally. Soon to be delivered products include the ability to run CMAQ with a realistic dispersion model using Daysmoke (for regional air quality modeling). Fire weather tools available include our input to the national fire season severity forecasts; soon we'll have a dataset of over 30 years of NOAA weather data for the Southeast, formatted for Fire Family Plus that will be useful for Fire Program Analysis. Further out products (time-wise) are information on the extent of mercury re-emissions from soil during fire and live fuels values from remote sensing.



- Kat Smith and Joe O'Brien returned to the Moody Tract in Baxley, GA to train Shan Cammack of Georgia DNR and an Americorps team on use of the infrared camera.

Technology Transfer Continued:

They also installed transpiration sensors in fire damaged longleaf trees and surveyed an area that had burned the previous evening. Using the camera, they found several areas of smoldering that were invisible to the naked eye.

- An abstract submitted to the Atmospheric Science and Air Quality Conference, to be held in April in San Francisco has been accepted. The talk, "A coupled modeling system for connecting prescribed fire activity data through CMAQ for simulating regional scale air quality" is co-authored by Gary Achtemeier, Scott Goodrick, and Yongqiang Liu.

Meetings/Reports:



- Stanturf chaired a meeting of the Forest Service Research Advisory Committee (FSRAC) in Albuquerque, NM. The group wrestled with the guidance from the USDA Ethics Office on the Adjunct

Faculty policy. FSRAC is interested in seeking some clarifications, and possibly amendments/revisions to that issuance. During the meeting, the group discussed the guidance with Ray Sheehan, USDA ethics chief. Sheehan is interested in extending the issuance to include information on serving as Principal Investigator and Co-Principal Investigator on university grant applications.



- Joe O'Brien and John Stanturf met with FS International Program personnel Alex Moad (Assistant Director, Technical Cooperation Group), Liz

Mayhew (Latin American Program Coordinator) and Jack Capp (Special Assistant to the Director). They discussed our international activities, ways to improve coordination with other agencies in the region, and explored new funding sources. Joe gave a brief presentation on the Bahamian and Dominican work and future plans in the region.



Sally Collins

- John Stanturf attended the Chief and Staff Stand Up meeting in the Chief's Office with Ann Bartuska, Deputy Chief for Research. Stanturf presented Associate Chief

Sally Collins with a copy of the newly released book *Restoration of Boreal and Temperate Forests*.

- Stanturf and O'Brien visited the Society of American Foresters headquarters in Bethesda. They met with Lori Gardner and Rita Neznok to finalize the web-survey on knowledge acquisition by professional foresters and with Matt Walls, new editor of the *Journal of Forestry* about article ideas from the Drought 2003 Conference held in Freiburg. Walls shared that some big changes will soon be announced for the JOF that will move it towards a more technical publication. They can confirm that there really is a Joe Smith who edits the *Forestry Source*.

- Stanturf attended the Washington Office Research Executive Team semi-weekly meeting at the offices in Roslyn, VA and met with other R&D staff. Various Logic Models and other CTA processes will be combined to formulate the FY 2007 budget. The various products of the teams will be merged by a "Team of Teams." The FY 2006 and 2007 budget requests will be organized around seven themes: Wildland Fire, Invasive Species, Recreation, Fish and Wildlife, Air and Water, Resource Management and Use, and Resource Data and Analysis. The current plan is to formulate the 2007 budget request using 24 subcategories of these themes. There is a somewhat different categorization that replaces the old RBAIS structure. The six Forest Service Goals relate to wildfire, invasive species, recreation, energy, watershed, and mission related work. In FY 2005, the unit's appropriated budget was in wildfire, invasives, energy, and watershed.

Partnerships:

- John Stanturf initiated a project with Michael Wimberly, University of Georgia, on "Best Management Practices for fuel reduction treatments in loblolly pine forests," funded by Joint Fire Sciences. (SRS 05-CA-11330136-079)



Dack Coleman

Soil Ecology at the University of Georgia. The symposium is to be held in Athens, GA on

- Mac Callaham was named to the coordinating committee for the symposium celebrating the career of Dr. David Coleman, Distinguished Research Professor of

Science Highlight:

Most people's images of Caribbean islands include deserted beaches, palm trees, rum, and pirates. Few know that the Caribbean boasts large areas of fire-dependent native pine forests. Extensive stands of endemic pines occur on the islands of the Bahamas, Cuba, the Florida Keys, Hispaniola, Honduras, and the Turks & Caicos. These unique tropical forests are fire dependent with some of the southernmost pines in the world. Typically the overstory contains one or two pine species and a very diverse understory that is low in stature. Bahamian pine forests resemble slash pine flatwoods of the coastal Southeastern US; Hispaniolan pine forests resemble longleaf-wiregrass stands; other forests are more like Rocky Mountain ponderosa pines. The similarity to US forests is only superficial; each island has a unique complement of species that structures its ecological communities. These forests share a common trait: all are hotbeds of biodiversity. The wide range of soils, topography and isolation among the islands has resulted in the evolution of many endemic plants and animals. For example in the Bahamas, the "pineyards" are home to a unique ground nesting parrot. High elevation Dominican pine forests have a relict Pleistocene bird community more typical of boreal forests, including scissor-bills and siskens. Nevertheless, the trogons and parrots flying around are reminders that you're in the Tropics. Incredibly, almost half of Cuba's flora is found nowhere else; Hispaniolan plant endemism is a close second at 36%. Island pine forests also serve as important winter habitat for many migratory birds including the endangered Kirtland's Warbler, and Bicknell's Thrush. Surprisingly, these remarkable forests have been almost completely ignored scientifically. The region is a frontier, especially with regard to fire ecology. The lack of scientific knowledge is a serious limitation to adequate forest management. In most of the region, fire management is *ad hoc* or non-existent and management is complicated by agricultural encroachment, fragmentation, and urbanization. Through partnerships with the Forest Service International Program, USAID, and The Nature Conservancy, unit staff has begun studying fire ecology, focusing initially on The Bahamas and the Dominican Republic. Last year, Joe O'Brien and Mac Callaham initiated a research program in Abaco National Park, to determine how different fire return intervals affect the ecology of Caribbean pines, endemic plants, and important wildlife food plants. We also want to understand the role of fire in soil ecology, nutrient dynamics, and measure the impact of fires on the nest environment of the endangered Bahamas Parrot. This work is in partnership with The Nature Conservancy,

the Bahamas Department of Agriculture, the Bahamas National Trust and local NGOs.

The Dominican Republic and Haiti share the island of Hispaniola, where stands of Hispaniolan pine (*Pinus occidentalis*) can be found at elevations of 7,000 to 10,000 feet in rugged mountainous terrain in the center of the island. These steep valleys covered with Hispaniolan pine comprise the headwaters of the most important rivers in both Haiti and the Dominican Republic. Unmanaged deforestation in Haiti has repeatedly resulted in catastrophic mudslides and flooding, resulting last summer in several thousand human deaths and untold environmental damage. The Dominican Forest Service fears similar mudslides could occur if a severe wildfire burned before being extinguished by heavy rains from a hurricane or tropical storm. Joe O'Brien plans to collaborate with Bill Gould of the International Institute of Tropical Forestry and Jason Drake of the University of Central Florida to map high risk fuels and forest cover in these remote valleys using remote sensing. This information will help Dominican forest managers, who are critically short on resources, to prioritize areas for fire management activities. Helping our neighbor countries manage their forests benefits our country as well. For example, most pine rocklands in the US exist as highly degraded fragments in South Florida and the Keys. The Bahamian pine rocklands, which still occur in pristine contiguous tracts, can act as a benchmark for restoration of US pine rocklands. Additionally, good management of the wintering grounds of Neotropical migratory birds is critical for the maintenance of US populations. A direct impact of helping establish good fire management practices on Hispaniola that avoids mudslides and damage to downstream rice farming will be the alleviation of further human suffering in one of the poorest nations on the planet, Haiti. On your next Caribbean vacation, forget the beach and break away from the herd. Head inland to enjoy some of the rarest and most unique pine forests you'll ever set foot in. It will be a memorable experience, especially if you stumble into a poisonwood thicket.



Funding:

- The unit received annual allocations for the National Fire Plan in the amount of \$1,892,500.
- Mac Callaham helped prepare a submission to the Department of Energy Terrestrial Carbon Processes (TCP) Program. The proposal, “Enriched Background Isotope Study (EBIS) A Multi-laboratory Renewal Proposal,” was submitted by the Coordinating Investigator, Paul Hanson. Co-PIs include Susan Trumbore, Chris Swanston, Margaret Torn, and Julie Jastrow, with sub-contractors William J. Parton, Jr., and Mac A. Callaham, Jr. The total amount requested is \$3.8 million over 3 years. (Callaham to be awarded \$60,000)

Personnel News:

- Scott Goodrick attended the Congressional Briefing Workshop in Washington, DC. Participants were provided with a hands-on understanding of congressional processes and procedures, as well as insight into the inner workings of the different Congressional committees that work on issues that may impact the Forest Service.
- Cynthia Fowler, former postdoc in SRS-4104, was offered a tenure-track position (Assistant Professor of Anthropology) at Wofford College in South Carolina. Congratulations, Cissy!

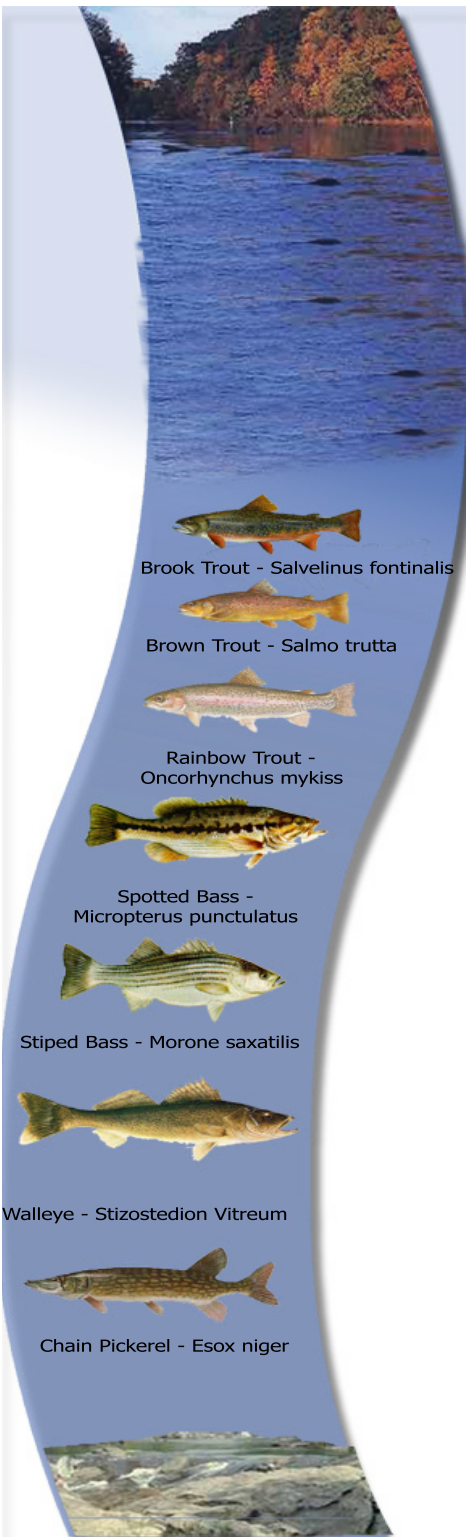
Bahamian Parrot

Kirtland's Warbler



Bicknell's Thrush

From the Cover (Masthead) - Cotton's high and fish are jump'n in Georgia.



“Conservation is the foresighted utilization, preservation and/or renewal of forests, waters, lands and minerals, for the greatest good of the greatest number for the longest time.

-Gifford Pinchot (1865-1946).



• Changes in Forest Service leadership following the retirement of Tommy Thompson, Deputy Chief for National Forest System include naming of Joel Holtrop as his replacement. Holtrop has most recently served as Deputy Chief for State and Private Forestry.

Pete Roussopoulos, Director of the Southern Research Station, will serve as Acting Deputy Chief for S&PF while a successor is sought.

• The government of Sweden inaugurated its Ministry of Sustainable Development on 1 January 2005, while concurrently terminating its Ministry of the Environment. Additional responsibilities for the new ministry include energy, emissions trading, and construction and housing, as well as coordinating the Government's work on sustainable development. Links to further information are at Sweden's Ministry of Sustainable Development website <http://www.sweden.gov.se/sb/d/2066>



• Wall Street continues to pressure timber companies to divest timberland assets. Texas-based Temple-Inland is the target of financier Carl Icahn, who announced his intent to buy up to \$1 billion in stock and nominate three members to its board of directors. According to David Brinkerhoff of Reuters, paper company stocks are underperforming the S&P 500 index, with price-to-earnings ratios around 16 times earnings, compared with 20 times for the overall S&P 500. Besides the steady cash flow from harvesting, timberland value has increased as real estate generally has increased in value. (Source: David Brinkerhoff, Reuters)

• Two developments in the forestry sector in Europe recently were initiated by the European Commission, a rural development initiative based on use of forest biomass for energy and an industry-based strategic partnership to promote innovation. The Robinwood project will seek to revitalize forestry resources, the wood sector and soil protection, and to further develop the use of forestry biomass for energy. Robinwood brings together the regions of Liguria (Italy), Brandenburg (Germany), Murcia (Spain), Wales (UK), Pomerania (Poland) and Eastern Slovakia.

A Technology Platform was formed to bring together various stakeholders in the forest-based industry around a common vision for 2030, to address specific challenges, create a coherent, dynamic strategy to achieve that vision and steer the implementation of an action plan to deliver agreed upon activities. The elaboration and follow-up of a Strategic Research Agenda forms a crucial part of the implementation strategy. In achieving its wider goals, a Technology Platform should generate sustainable competitiveness and world leadership for the European Union (EU) in the field, stimulate increased and more effective investment in R&D, accelerate innovation and eliminate barriers to the deployment and growth of new technologies. Innovation is a key driver for future competitiveness and economic growth in Europe. Research for innovation has legal status in the new EU Constitution. Research is predominantly carried out in institutes and universities, particularly basic research, although some companies do invest in research directed towards product development. The sector remains fragmented - something that the establishment of the Technology Platform is aimed at addressing. The high level group from the European Confederation of Woodworking Industries (CEI-Bois), Confederation of European Forest Owners (CEPF) and Confederation of European Paper Industries (CEPI) coordinating the platform has already drafted a list of strategic objectives that must be reached in order to meet its 2030 vision. These include: enhancing the availability and use of forest biomass; developing intelligent and efficient manufacturing processes; deepening the sector's scientific basis by taking advantage of emerging sciences; and improving communication with the public and policy makers. The platform will now start work on developing a strategic research agenda and implementation plan. Further information on the forest-based industry Technology Platform is at <http://www.forestplatform.org>. (Source: CORDIS RTD-NEWS)

• Worldwide, there is growing interest in market-based approaches to conservation. Markets and payments for ecosystem services, such as carbon sequestration, watershed protection, and biodiversity conservation are emerging as a viable alternative to protect and restore ecosystems while rewarding landowners for good land management practices. Lack of information - about buyers and sellers, about how these markets work, about how to design and monitor payment systems - is the most fundamental barrier obstructing market development around the world. This lack of information leads to high transaction costs, confusion on how to value

ecosystem services, high uncertainties and risk, and general suspicion of market mechanisms. In partnership with Forest Trends, PROFOR (World Bank Program on Forests) takes a three-prong approach to overcome this barrier of information by 1) supporting the Ecosystem Marketplace; 2) field testing tools for payment for environmental services projects; and 3) encouraging ecosystem service market development in Africa and China. These activities seek to democratize information and understanding on these markets among landowners and communities that have traditionally been excluded from the benefits of market mechanisms. (Source: PROFOR Periodic Update) More information is available at: <http://www.profor.info/financingSFM/EcosystemMarketplace.htm>



• The Task Force on the Future of American Innovation, a coalition of high-tech industry, scientific societies, and higher education associations, warned that the US is in danger of losing its leadership role in science and innovation. They identified the weakening federal commitment to invest in science and research as a root cause of the problem, as well as being a necessary part of the solution. A set of benchmarks in education, workforce, ideas, and research investment shows that other regions, particularly Asia, are sharply pursuing the US. Examples included the following: The proportion of US-citizens in science and engineering graduate studies within the US is declining. From 1994 to 2001, graduate S&E enrollment in the US declined by 10% for US citizens but increased by 25% for foreign-born students. There are rapidly increasing retirements from science and engineering jobs, leading to a potential shortage in the labor market. Unless more domestic college-age students choose to pursue degrees in critical S&E fields, there is likely to be a major shortage in the high-tech talent for federal research and national defense agencies. The US share of S&E papers published worldwide declined from 38% in 1988 to 31% in 2001. Europe and Asia are responsible for the bulk of growth in scientific papers in recent years. Additional benchmarks cited by the group and further analysis are in the report, "The Knowledge Economy: Is the United States Losing Its Competitive Edge?" (Source: ASA-CSSA-SSSA Science Policy Report) For further information, go to www.futureofinnovation.org/PDF/Benchmarks_PR.pdf

FY 2005 Publications: (*denotes new publication this month)

Refereed Journals and Book Chapters

***Achtemeier, Gary L.** 2005. Planned Burn-Piedmont. A local operational numerical meteorological model for tracking smoke on the ground at night: model development and sensitivity tests. *International Journal of Wildland Fire* 14: 85-98.

Baumhauer, Madsen, P., **Stanturf, J.A.** 2005. Regeneration by direct seeding—a way to reduce costs of conversion. Chapter 22 in Stanturf, J.A. and Madsen, P., eds. *Restoration of Temperate and Boreal Forests*. CRC Press, Boca Raton. P. 349-354.

Brockway, D.G., **Outcalt, K.W.**, Tomczak, D.J., Johnson, E.E. 2005. Restoring longleaf pine forest ecosystems in the southern U.S. Chapter 32 in Stanturf, J.A. and Madsen, P., eds. *Restoration of Temperate and Boreal Forests*. CRC Press, Boca Raton. P. 501-519.

*Cunningham, P., **Goodrick, S.**, Hussaini, M.Y., Linn, R. 2005. Coherent vortical structures in numerical simulations of buoyant plumes from wildland fires. *International Journal of Wildland Fire* 14: 61-75

Gardiner, Emile S., **Stanturf, John A.**, Schweitzer, Callie J. 2004. An afforestation system for restoring bottomland hardwood forests: biomass accumulation of Nuttall oak seedlings interplanted beneath eastern cottonwood. *Restoration Ecology* 12(4): 525-532.

Haight, Robert G., **Cleland, David T.**, Hammer, Roger B., Radeloff, Volker C., Rupp, T. Scott. 2004. Assessing fire risk in the wildland-urban interface. *Journal of Forestry* 102(7): 41-48.

Hoadley, Jeanne L., Westrick, Ken, Ferguson, Sue A., **Goodrick, Scott L.**, Bradshaw, Larry, Werth, Paul. 2004. The effect of model resolution in predicting meteorological parameters used in fire danger rating. *J. Applied Meteorology*, 43(10): 1333-1347.

Kennard, D. K. 2004. Commercial tree regeneration 6 years after high-intensity burns in a seasonally dry forest in Bolivia. *Canadian Journal of Forest Research* 34(11): 2199-2207.

***Kennard, D. K.**, Rauscher, H. M., Flebbe, P. A., Schmoldt, D. L., Hubbard, W. G., Jordin, B., Milnor, W. H. 2005. Using hyperdocuments to manage scientific knowledge: the prototype Encyclopedia of Southern Appalachian Forest Ecosystems. *Forest Ecology and Management*, 207 (1-2) 201-213.

Long, Alan J., **Wade, Dale D.**, Beall, Frank C. 2004. Managing for fire in the interface: Challenges and opportunities. Chapter 13 in Vince, Susan W., Duryea, Mary L., Macie, Edward A., Hermansen, L. Annie, eds., *Forests at the Wildland-Urban Interface*. CRC Press, Boca Raton. P. 201-223.

Paladino, J.C.L., Guapyassú, M.S., Platais, G.H. 2005. Restoration practices in Brazil's Atlantic rainforest. Chapter 27 in Stanturf, J.A. and Madsen, P., eds. *Restoration of Temperate and Boreal Forests*. CRC Press, Boca Raton. P. 5409-422.

Stanturf, J.A. 2005. What is forest restoration? Chapter 1 in Stanturf, J.A. and Madsen, P., eds. *Restoration of Temperate and Boreal Forests*. CRC Press, Boca Raton. P. 3-11.

Stanturf, J.A. and Madsen, P. 2005. *Restoration of Temperate and Boreal Forests*. CRC Press, Boca Raton. 569 pp.

Stanturf, J.A. and Madsen, P. 2005. Preface in Stanturf, J.A. and Madsen, P., eds. *Restoration of Temperate and Boreal Forests*. CRC Press, Boca Raton. P. ix-xvii.

Van Lear, D.H. and Wurtz, T.L. 2005. Cultural practices for restoring and maintaining ecosystem function. Chapter 11 in Stanturf, J.A. and Madsen, P., eds. *Restoration of Temperate and Boreal Forests*. CRC Press, Boca Raton. P. 173-192.

Proceedings and Reports

***Clark, Alexander III** and Daniels, Richard F. 2004. Wood quality of slash pine and its effect on lumber, paper, and other products. In Dickens, E.D., Barnett, J.P., Hubbard, W.G. and Jokela, E.J. eds., *Slash Pine: Still Growing and Growing!* Proceedings of the Slash Pine Symposium held April 23–25, 2002, Jekyll Island, Georgia. USDA Forest Service Southern Research Station; General Technical Report SRS-76, Asheville, NC; pp. 61-65.

Fowler, C. 2004. *Fire education programs in the Southern United States*. Encyclopedia of Southern Fire Science <http://www.forestencyclopedia.net>. USDA Forest Service, Southern Research Station.

Fowler, C. 2004. *Human health and forest fires in the Southern United States*. Encyclopedia of Southern Fire Science <http://www.forestencyclopedia.net>. USDA Forest Service, Southern Research Station.

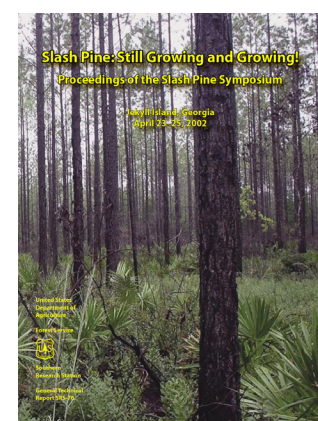
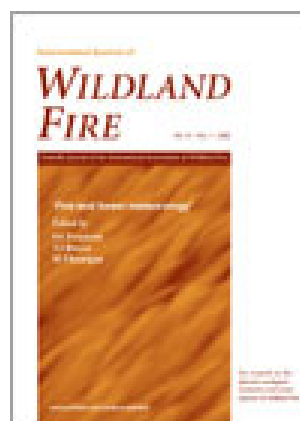
Fowler, C. 2004. *Effects of Fire on cultural resources in the Southern United States*. Encyclopedia of Southern Fire Science <http://www.forestencyclopedia.net>. USDA Forest Service, Southern Research Station.

Fowler, C. 2004. *A History of human-caused fires in the Southern United States*. <http://www.forestencyclopedia.net>. Encyclopedia of Southern Fire Science. USDA Forest Service, Southern Research Station.

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Myers, R., **Wade, D.**, and Bergh, C. 2004. Fire management assessment of the Caribbean pine (*Pinus caribea*) forest ecosystems on Andros and Abaco Islands, Bahamas. GFI Publication no. 2004-1. The Nature Conservancy, Arlington, VA. 18 pp.

Outcalt, Kenneth W. 2004. Longleaf pine restoration the Hitchiti Experimental Forest. The Southern Restorationist 4(2): 4. (Summer/Fall 2004 issue of the Newsletter of the Coastal Plain Chapter, Society for Ecological Restoration; <http://ser-coastalplains.org/pdfdoc/Summ%20Fall%2004.pdf>)





Publications

Reitz, Richard D. and Geissler, George L. 2003. Community advisor—Firewise. In Proc. Society of American Foresters National Convention, 25-29 October 2003, Buffalo, NY. P. 63-72.

Stanturf, J.A., Gardiner, E.S., Conner, W., Outcalt, K., Guldin, J. 2004. Restoration of southern forest ecosystems. In Rauscher, H.M., Johnsen, K., eds. Southern Forest Science: Past, Present, Future. USDA Forest Service Southern Research Station, Asheville, NC; General Technical Report SRS-75; pp. 123-131.

Zhang, Yangjian. 2004. Identification of the wildland-urban interface at regional and landscape scales. Ph.D. dissertation, University of Georgia; 116 pg. (Performed under cooperative research agreement # SRS-02-CA-11330136-182, Wimberly and Stanturf).

Abstracts and Posters

DiCosty, R., Kelley, S., Rials, T., **Stanturf, J.A.** 2004. Soil black carbon levels and soil organic matter quality under interval prescribed burning in the southeastern United States. Eurosoil 2004, 4-12 September, Freiburg, Germany [Poster]

DiCosty, Ralph and Stanturf, John. 2004. Fifty years of prescribed burning: effects on soil organic matter composition and podzolization in a Spodosol soil profile in the Southeastern United States. Soil Science Society America Annual Meeting Abstracts.

Gardiner, Emile S., **Stanturf, John A.**, Hamel, Paul B., and Leininger, Theodor D. 2004. Early stand development, carbon sequestration, and wildlife use under conventional versus intensive afforestation practices in the Lower Mississippi Alluvial Valley. 22nd Session International Poplar Commission, The Contribution of poplars and willows to sustainable forestry and rural development, Santiago, Chile 29 Nov-2 Dec 2004; p. 96 [Abstract]

Goodrick, Scott, Liu, Yongqiang, and Stanturf, John. 2004. Spatial modeling of drought using artificial neural networks. In Impacts of the Drought and Heat in 2003 on Forests, Berichte Freiburger Forstliche Forschung, Heft 57: 18.

Liu, Y., G. Achtemeier, and S. Goodrick. 2004. Air quality effects of prescribed fires simulated with CMAQ. The Third Models-3 Workshop, Chapel Hill, NC, 18-20 Oct 2004. (Extended abstract, paper 6.5, pp 1-4, available from http://www.cmascenter.org/html/2004_workshop/abstracts_presentations.html).

Liu, Yongqiang, Stanturf, John, and Goodrick, Scott. 2004. Modeling ecosystem water stress and fire risk under drought conditions. In Impacts of the Drought and Heat in 2003 on Forests, Berichte *Freiburger Forstliche Forschung*, Heft 57: 56.

Stanturf, Bland, Samuelson, Leininger, Burke. 2004. Three-year growth response of four clones of eastern cottonwood (*Populus deltoides* Bartr. ex Marsh.) to fertigation. 22nd Session International Poplar Commission, The Contribution of poplars and willows to sustainable forestry and rural development, Santiago, Chile 29 Nov-2 Dec 2004; p. 118 [Abstract]

Stanturf, Bland, Samuelson, Leininger, Burke. 2004. Three-year growth response of four clones of eastern cottonwood (*Populus deltoides* Bartr. ex Marsh.) to fertigation. Biomass and bioenergy production for economic and environmental benefits, Short Rotation Woody Crops Operations Working Group Biennial Meeting, Charleston, SC November 2004; p. 59 [Abstract]

***Wade, D.**, Brenner, J., Anderson, J., Graham, H., Goodrick, S., Gorden, R., Hebb, M., Kern, J., Kuypers, M., Miller, S., Mousel, K., Proctor, T., and Voltolina, D. 2004. Some considerations when prescribed burning at the Wildland-Urban Interface. Tall Timbers Fire Ecology Conference Proceedings 22:318 [Abstract]



Upcoming Events:

2005

- Mar 1-3 13th Biennial Southern Silvicultural Research Conference, Memphis <http://www.srs.fs.usda.gov/disturbance/bssrc>
- Mar 7-11 Model Development: Landfire Rapid Assessment Reference Condition Modeling Workshop, Southeastern U.S., Tallahassee, FL. Outcalt to attend.
- Mar 13-16 Emerging Issues Along Urban/Rural Interfaces: Linking Science and Society; Atlanta, IUFRO 6.00; <http://www.sfw.s.auburn.edu/urbanruralinterfaces/>
- Mar 16-18 Coastal Plains Chapter of the Society for Ecological Restoration and the Florida Chapter of The Wildlife Society joint meeting, Brooker Creek Preserve, FL
- Mar 21-24 USDA Symposium Greenhouse Gases In Agriculture and Forestry: Refining Knowledge and Building Tools, Baltimore, MD; <http://soilcarboncenter.k-state.edu/conference>
- Mar 29-31 Management Team Meeting, Charleston, SC. Stanturf & Callahan to attend.
- Mar 29-Apr 6 Global Soil Change: Time-Scales and Rates of Pedogenic Processes, Montecillo, Mexico. <http://www.iuss.org/popup/Mexico%202005.htm>
- *Apr 13-14 Plum Creek Symposium on Kyoto, Forests, and Living Tree Markets: Science and Land Use Policy In Carbon Sequestration; Missoula, Montana, <http://www.forestry.umn.edu/kiosk/Conference/Carbon/default.htm>
- Apr 19-21 Resource Management Tools & Geospatial Conference, "Envisioning Information," Phoenix, Arizona (with short courses on April 18 & 22)
- Apr 24-29 Symposium Analysis and Characterization of Black Carbon in the Environment, to be held during the European Geosciences Union General Assembly, Vienna, Austria; DiCosty to attend and present poster http://www.cosis.net/members/meetings/sessions/information.php?p_id=132&s_id=2304&PHPSESSID=9d31fbbe1e858d5f6e74a6a8e3db092c
- Apr 25-27 Biennial Georgia Water Resources Conference, Athens; <http://ga.water.usgs.gov/gwrc/callforpapers.html>
- Apr 26-29 IUFRO conference on Biodiversity and Conservation Biology in Plantation Forests to be held in Bordeaux, France; <http://www.pierroton.inra.fr/IEFC/manifestations/IUFROD82005.html>
- *Apr 27-29 Atmospheric Science and Air Quality Conference, San Francisco, CA. Achtemeier to attend and present paper
- May 11-13 Conference on Remote Sensing and Fire, to be held at George Mason University in Fairfax, VA.
- May 11-13 International Conference on Transfer of Forest Science Knowledge and Technology Transfer, Troutdale, OR; <http://www.fs.fed.us/pnw/calendar/tech-transfer/index.shtml>

Upcoming Events:

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| <p>*May 22-25 Soil Ecology Society Meetings at the Argonne National Laboratory in Illinois. Callahan to attend and present.</p> <p>Jun 6-10 National Silviculture Workshop, "Restoring fire-adapted forested ecosystems" Granlibakken Conference Center in Tahoe City, California</p> <p>Jun 12-16 5th North American Forest Ecology Workshop, Aylmer, Quebec, Canada; http://www.unites.uqam.ca/gref/nafew2005/</p> <p>Jun 20-24 5th International Conference on Forest Vegetation Management, IUFRO Research Group 1.13.00 Forest Vegetation Management, Corvallis, Oregon, USA. http://outreach.cof.orst.edu/icfvm/index.htm</p> <p>*Jun 20-23 Southern Forest Tree Improvement Conference (SFTIC), Sheraton Capital Center, Raleigh, North Carolina; http://www.ncsu.edu/feop/sftic/</p> <p>Jul 17 – 20 American Society Agricultural Engineers (ASAE) annual meeting, Tampa, Florida; session on Forest Engineering Contributions to Biomass Collection and Transport organized by Bryce Stokes, Email: bstokes@fs.fed.us</p> <p>Jul 18-22 AFFORNORD, Conference on Effects of Afforestation on Ecosystems, Landscape & Rural Development, Reykholt, Iceland; http://www.skogur.is</p> <p>*Jul 26-28 IUFRO Conference "The Thin Green Line," a symposium on the state-of-the-art in reforestation; Thunder Bay, Ontario, Canada; http://www.forestrenewal.ca/thingreenline</p> <p>Aug 5-7 IUFRO meeting, Improving Productivity in Mixed-Species Plantations, Southern Cross University, Lismore, Australia; contact dnichols@scu.edu.au</p> <p>Aug 8-13 IUFRO World Congress, Brisbane, Australia. Stanturf to attend. http://www.iufro2005.com</p> <p>Sep 9-10 Pre-Conference Workshop in association with Pedometrics 2005 Conference, Gainesville, FL. http://conference.ifas.ufl.edu/pedometrics/#optional</p> <p>Sep 10-12 European Forestry Institute annual conference and Scientific Seminar "Multifunctional Forest Ecosystem Management in Europe: Integrated approaches for considering the temporal, spatial and scientific dimensions" Centre Tecnològic Forestal de Catalunya (CTFC), Barcelona, Spain</p> <p>Sep 12-14 Pedometrics 2005: Frontiers in Pedometrics, Naples, FL. http://conference.ifas.ufl.edu/pedometrics/</p> <p>Sep 12-18 Society for Ecological Restoration 17th International Conference, Zaragoza, Spain. http://www.ecologicalrestoration.net</p> <p>Sep 20-21 NOAA/EPA Golden Jubilee Symposium on Air Quality Modeling and Its Applications, Durham, NC.</p> <p>*Sep 25-30 MEDPINE 3: International Conference on Conservation, Regeneration and Restoration of Mediterranean Pines and their Ecosystems, MAIB, Mediterranean Agronomic Institute of Bari - Valenzano (Bari), Italy. For further information contact: Angela Inchigolo or Elvira Loiudice (loiudice@iamb.it)</p> | <p>Oct 15-20 International conference on "Metal fluxes and their stress on terrestrial ecosystems," Centro Stefano Franscini, Monte Verità, Ascona, Switzerland; http://www.waldschutz.ch/bioindic/monte_verita/ [Abstracts due 1 May 2005]</p> <p>Oct 17-19 23rd Tall Timbers Fire Ecology Conference "Fire In Grassland and Shrubland Ecosystems", Bartlesville, OK; http://www.talltimbers.org</p> <p>Oct 19-23 Society American Foresters Annual Meeting, Ft. Worth, TX</p> <p>Nov 6-10 Soil Science Society of American Annual Meeting, Salt Lake City, UT</p> <p>Nov 7-11 IUFRO Tree Biotechnology 2005 Meeting, Pretoria, South Africa ; www.iufro.up.ac.za.</p> <p>Nov 15-17 Fire in Eastern Oak Forests: Delivering Science to Managers, Ohio State University, Columbus, OH; contact Matt Dickinson mbdickinson@fs.fed.us</p> <p>2006</p> <p>*Apr 8-12 International Conference on Hydrology and Management of Forested Wetlands, New Bern, North Carolina; http://www.asae.org/imis/meeting/forestcall.cfm</p> <p>Jul 9-15 18th World Congress of Soil Science, in Philadelphia, PA http://www.18wcso.org</p> <p>Oct 25-29 Society American Foresters Annual Meeting, Pittsburgh, PA</p> |
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Who is this man and where is he hiding? See the March 2005 PL Report for answers!

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GPRA -Accomplishment

Category	FY 2004 Total	FY 2005 Total
Number of Refereed Journal Publications	20	15
Number of Non-Refereed Publications (include abstracts)	89	20
Number of Publications (refereed + non-refereed)	109	35
Number of Tours	41	20
Number of Short Courses/Training	20	7
Number of Invited Presentations to Scientific Organizations	12	2
Number of Invited Presentation to Lay Organizations	30	18
Volunteer Presentations to Scientific Organizations (non-GPRA	42	14
Number of Technology Transfer Activities (other than above)	105	73
Outside Funding	\$2,610,574	\$2,870,469

SRS-4104 Project Leader's Report

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